**ID.4**

**Normal Distribution Presentation**

1. A forest products company claims that the amount of usable lumber in its harvested trees averages 172 cubic feet and has a standard deviation of 12.4 cubic feet. Assume that these amounts have approximately a normal distribution.
2. At two years of age, sardines inhabiting Japanese waters have a length distribution that is approximately normal with mean 20.20 cm and standard deviation 0.65 cm.
3. The mean cholesterol level in children is 175 mg/dL with standard deviation 35 mg/dL. Assume this level varies from child to child according to an approximate normal distribution.
4. Porphyrin is a pigment in blood protoplasm and other body fluids that is significant in body energy and storage. In healthy Alaskan brown bears, the amount of porphyrin in the bloodstream (in mg/dL) has approximate normal distribution with mean 47.5 and standard deviation 12.2.
5. Healthy 10-week-old domesticated kittens have average weight 24.5 oz. with a standard deviation of 5.25 oz. The distribution is approximately normal.
6. GPAs of SUNY Oswego freshman biology majors have approximately the normal distribution with mean 2.87 and standard deviation .34.
7. The length of elephant pregnancies from conception to birth varies according to a distribution that is approximately normal with mean 525 days and standard deviation 32 days.
8. Wingspans of adult herons have approximate normal distribution with mean 125 cm and standard deviation 12 cm.
9. When robins’ eggs are weighed, it turns out that they vary according to approximately the normal distribution with mean 17.5 mg and standard deviation 3.5 mg.